

ULTRABASS

BX3000T



User's Manual

Version 1.0 January 2003

ENGLISH



www.behringer.com

ULTRABASS BX3000T

SAFETY INSTRUCTIONS



CAUTION: To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

DETAILED SAFETY INSTRUCTIONS:

All the safety and operation instructions should be read before the appliance is operated.

Retain Instructions:

The safety and operating instructions should be retained for future reference.

Heed Warnings:

All warnings on the appliance and in the operating instructions should be adhered to.

Follow instructions:

All operation and user instructions should be followed.

Water and Moisture:

The appliance should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool etc.).

Ventilation:

The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be placed on a bed, sofa, rug, or similar surface that may block the ventilation openings, or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

Heat:

The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

Power Source:

The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

Grounding or Polarization:

This device must be grounded.

Power-Cord Protection:

Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, extension cords and the point where they exit from the appliance.

Cleaning:

The appliance should be cleaned only as recommended by the manufacturer.

Non-use Periods:

The power cord of the appliance should be unplugged from the outlet when left unused for extended periods of time.

Debris and Liquid Entry:

Care should be taken that debris and/or liquids do not enter the enclosure through openings.

Damage Requiring Service:

The appliance should be serviced by qualified service personnel when:

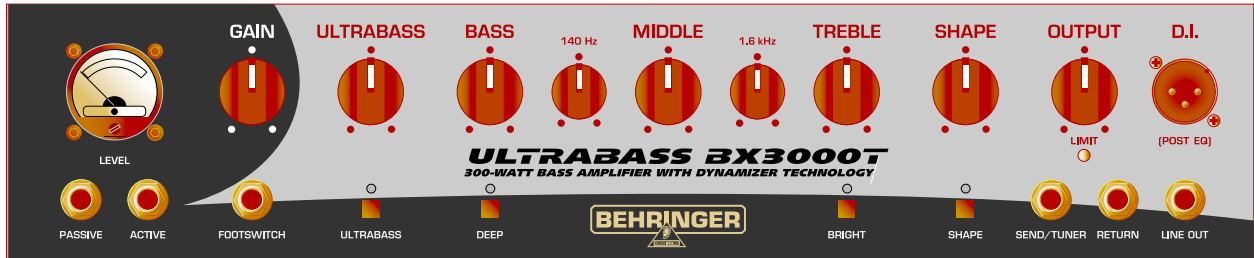
- ▲ The power supply cord or the plug has been damaged; or
- ▲ Debris or liquid has entered the appliance; or
- ▲ The appliance has been exposed to rain; or
- ▲ The appliance does not appear to operate normally or exhibits a noticeable change in performance; or
- ▲ The appliance has been dropped, or the enclosure damaged.

Servicing:

The user should not attempt to service the appliance beyond that which is described in the operating instructions. All other servicing should be referred to qualified service personnel.

ULTRABASS

300-Watt bass amplifier with DYNAMIZER technology



- ▲ Extremely powerful 300-Watt RMS bass amp head
- ▲ Patented DYNAMIZER technology for ultimate punch
- ▲ Switchable ULTRABASS sub-harmonics processor for unbelievable low-end power
- ▲ Revolutionary SHAPE filter for extreme sound range
- ▲ Extremely musical 5-band EQ with “Bright” and “Deep” functions for ultimate tone-shaping
- ▲ Integrated limiter and active, temperature-controlled cooling system for ultimate protection
- ▲ Vintage-style VU meter for precise signal level control
- ▲ Dual footswitch for ULTRABASS and SHAPE functions included
- ▲ Balanced XLR DI output, easily accessible on the front panel
- ▲ Effects loop with tuner function and line output for additional flexibility
- ▲ 3 speaker outputs on 1/4" jack and SPEAKON® connectors
- ▲ Ultra-rugged power supply with toroidal transformer for highest power reserves
- ▲ Extremely rugged construction ensures long life, even under the most demanding conditions
- ▲ Manufactured under ISO9000 certified management system

BX3000T

ULTRABASS BX3000T

FOREWORD



Dear Customer,

Welcome to the team of ULTRABASS users and thank you very much for expressing your confidence in BEHRINGER products by purchasing the BEHRINGER BX3000T.

It is one of my most pleasant tasks to write this letter to you, because it is the culmination of many months of hard work delivered by our engineering team to reach a very ambitious goal: to present you with an outstanding bass workstation that gives

you maximum flexibility and performance with its unique sound character and broad range of functions.

The task to design the new ULTRABASS certainly meant a great deal of responsibility, which we assumed by focusing on you, the discerning user and musician. It also meant a lot of work and night shifts to accomplish this goal. But it was fun, too. Developing a product usually brings a lot of people together, and what a great feeling it is when everybody who participated in such a project can be proud of what we've achieved.

It is our philosophy to share our joy with you, because you are the most important member of the BEHRINGER team. With your highly competent suggestions for new products you've greatly contributed to shaping our company and making it successful. In return, we guarantee you uncompromising quality (manufactured under ISO9000 certified management system) as well as excellent technical and audio properties at an extremely favorable price. All of this will enable you to fully unfold your creativity without being hampered by budget constraints.

We are often asked how we can produce such high-grade devices at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers means large sales volumes enabling us to get better conditions of purchase for components, etc. Isn't it only fair to pass this benefit back to you? Because we know that your success is our success, too!

I would like to thank all people whose help on "Project ULTRABASS" has made it all possible. Everybody has made very personal contributions, starting from the designers of the unit to the many staff members in our company and finally to you, the users of BEHRINGER products.

My friends, it's been worth the trouble!


Thank you very much,

Uli Behringer

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WARNING!

 It should be pointed out that extreme output volumes may damage your hearing and/or your headphones. Turn down all LEVEL controls before you switch on the unit. Always set the volume at an appropriate level.

1. INTRODUCTION

Congratulations! With the BX3000T you have acquired a pro-level amplifier from our BX bass amplifier series. This revolutionary bass amplifier top has many of the features of our successful BX1200. Our top goal when designing the BX3000T was to set *new* standards. In fact, the BX3000T is a bass amp that gives you a full set of features plus a comprehensive range of connection and expansion options. With this amp you'll certainly rattle the planet!

BEHRINGER is an audio engineering company that has been successfully developing products for studio and live applications for many years now. Our range of products includes microphones and a variety of 19" devices (compressors, enhancers, noise gates, tube processors, headphone amps, digital effects devices, DI boxes, etc.) as well as monitoring and P.A. speakers plus professional live and recording consoles. You will find all of our technical know-how combined in your BX3000T.

Flexibility has become a particularly important factor in the music business over the past few years. Modern bass players need to offer a broad range of sounds, but should still be able to play in different kinds of applications at short notice: home recording, studio, live concerts. For this reason, it has always been our prime concern to give you a bass amplifier that offers a complete set of useful functions, but can still be operated intuitively and quickly.

Additionally, the world of electric bass playing has changed: new basses, with five or six strings, are being launched all the time, there are effects devices and the desire to create one's own "unique" sound—which can only be achieved with innovative amplifiers. Our unique ULTRABASS BX3000T gives you pioneering sounds and power galore.

We have expanded our BX Series with this amplifier top to give you all the freedom you need when expanding your set-up. No matter which speakers or cabinets you prefer—with its superb sound, your BX3000T will bring some life into your speaker.

As technology advances, you've got to keep track of the latest technological breakthroughs to avoid falling by the wayside. Which is what we did, by continuously improving this bass amplifier and including many of your valuable suggestions.

Experience a new-generation bass amp with fascinating features:

- ▲ Astounding sound diversity through SHAPE filter and ULTRABASS sub-harmonics processor.
- ▲ Unbelievable punch through innovative DYNAMIZER preamp technology.
- ▲ More gain, but no distortion through built-in limiter.
- ▲ Optimum level metering through clearly visible VU meter.
- ▲ A 5-band EQ with additional "Deep" and "Bright" functions meets all requirements in terms of tone-shaping.
- ▲ Plenty of power plus a built-in DI output—even on big stages you'll cut a fine figure with your BX3000T.

1.1 The design concept

This absolutely low-noise and indestructible bass amp represents the current state of the art.

The rugged enclosure of your ULTRABASS ensures that the unit will withstand rough handling on the road over many years.

1.1.1 Patented DYNAMIZER technology

When it comes to amplifying the signals delivered by electric instruments, you've got to separate the wheat from the chaff. Unlike mixed or mastered signals, electric instruments usually deliver extremely high signal peaks which, when raised in gain, produce nasty distortion. How an amplifier responds to these


signal peaks can therefore be seen as one of its most essential quality features.

Many manufacturers use limiters preceding the power stage to limit dynamic signal peaks. However, the problem is the preamp, which is why we've equipped the BX3000T with our unique DYNAMIZER preamp circuitry that gives you a lively and punchy sound with signal peaks—even if the amp reaches its power limits. Extreme signal peaks are limited effectively while the average level and hence the power of the overall signal is raised. The sound gets more vivid and powerful in character, without any unmusical distortion. With its limiter in the power stage it is virtually impossible to overdrive the ULTRABASS BX3000T.

1.2 Before you get started


1.2.1 Shipment

Your BX3000T was carefully packed at the factory and the packaging is designed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage that may have occurred during transit.


 **If the unit is damaged, please do not return it to BEHRINGER, but notify your dealer and the shipping company immediately, otherwise claims for damage or replacement may not be granted. Shipping claims must be made by the consignee.**


1.2.2 Initial operation

Be sure that there is enough space around the unit for cooling and please do not place the ULTRABASS on high temperature devices such as radiators etc. to avoid overheating.


 **Before you connect your ULTRABASS to the mains, please make sure that your local voltage matches the voltage required by the unit:**

The fuse holder on the female mains connector has 3 triangular markings, with two of these triangles opposing each other. The ULTRABASS is set to the operating voltage printed next to these markers and can be set to another voltage by turning the fuse holder by 180°. **CAUTION: This instruction does not apply to export models exclusively designed e.g. for 120 V operation!**

 **If you set the unit to a different mains voltage, be sure to use a fuse of the correct type and rating. Please refer to the "SPECIFICATIONS" for details.**

 **Blown fuses must be replaced by fuses of the same type and rating! Please refer to the "SPECIFICATIONS" for details.**

The mains connection of the BX3000T is made by using the enclosed mains cable and a standard IEC receptacle. It meets all of the international safety certification requirements.

 **Please make sure that all units have a proper ground connection. For your own safety, never remove or disable the ground conductor from the unit or of the AC power cord.**

1.2.3 Warranty

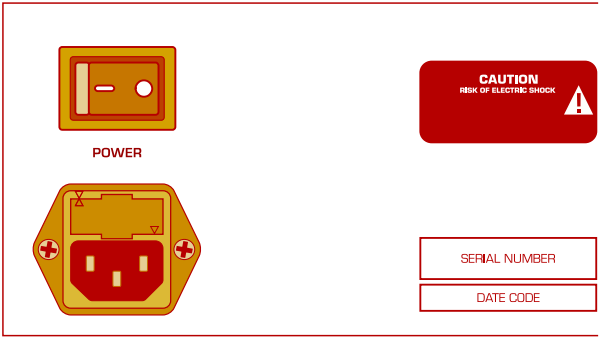
Please take the time to fill in and return the warranty card within 14 days after the date of purchase, so as to benefit from our extended warranty. The serial number is printed on the top side of the unit. Or register online at www.behringer.com.

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BRIGHT

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2.2 Rear panel





5. ULTRABASS FUNCTION

Extremely low bass sounds playing one octave below the lowest available bass guitar frequency are quite trendy in current music productions. Often, you can do this in studios only, because most bass amplifiers have no sub-harmonics function. Not so with your BX3000T: the ULTRABASS processor gives you the ultimate tool to shape up-to-date sounds.

You'll be surprised how deep your bass can sound with the ULTRABASS function of your BX3000T. Extreme settings can be particularly interesting if you want to give your sound some flavor in the treble range. By the way: when you use the SHAPE filter set to a low cut-off frequency (which is a nice setting for growling sounds), but feel that there's not enough power in the bass range, the sub-harmonics processor will be there to help you: even though the sound is still growling, now it has much more depth.

The ULTRABASS function can easily be switched on and off via the supplied footswitch. This allows you to fine-tune certain passages only.

6. INSTALLATION

6.1 Mains connection

The mains connection is made by using the enclosed mains cable and a standard IEC receptacle. It meets all of the international safety certification requirements.

Please make sure that all units have a proper ground connection. For your own safety, never remove or disable the ground conductor of the unit or of the AC power cable.

6.2 Audio connections

The BEHRINGER ULTRABASS is equipped with mono phone jacks, except for the D.I. output which is on a balanced XLR connector. The speaker jacks are on 1/4" and SPEAKON® connectors.

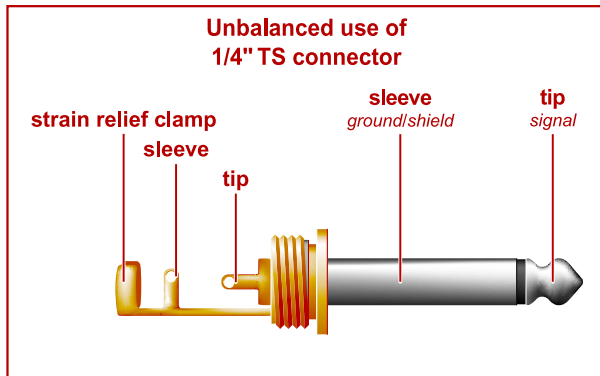
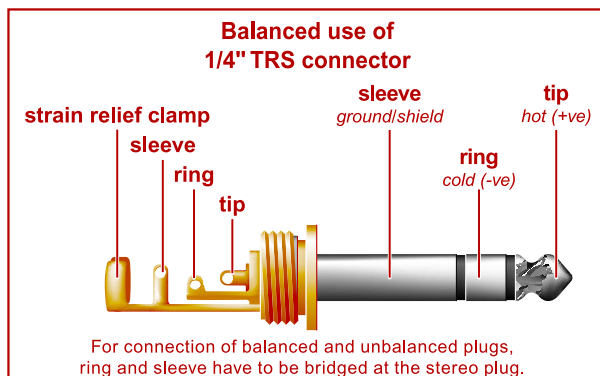


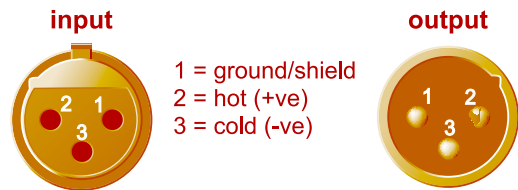
Fig. 6.1: 1/4" TS connector



For connection of balanced and unbalanced plugs, ring and sleeve have to be bridged at the stereo plug.

Fig. 6.2: 1/4" TRS connector

Balanced XLR connectors



For unbalanced use pin 1 and pin 3 have to be bridged

Fig. 6.3: XLR connectors

Please ensure that only qualified personnel install and operate the BX3000T. During installation and operation the user must have sufficient electrical contact to earth. Electrostatic charges might affect the operation of the unit.

6.2.1 Loudspeaker connections

In total, your BX3000T features three loudspeaker connectors.

When connecting loudspeakers to the 1/4" jack connectors, please switch off the device first. Power up the unit again after all connections have been made.

Please use the SPEAKON® connector, if you want to connect one speaker cabinet only. For optimum output power delivered to the speaker(s), use your BX3000T in combination with one 4 Ω or two 8 Ω cabinets.

Your BX3000T is equipped with high-quality NEUTRIK NL4MP SPEAKON® connectors which ensure safe and trouble-free operation. The SPEAKON® connector was especially developed for high-power loudspeakers. Once it is plugged in, it safely locks into its position and cannot be accidentally disengaged. It prevents the occurrence of electrical shock and ensures the correct polarity.

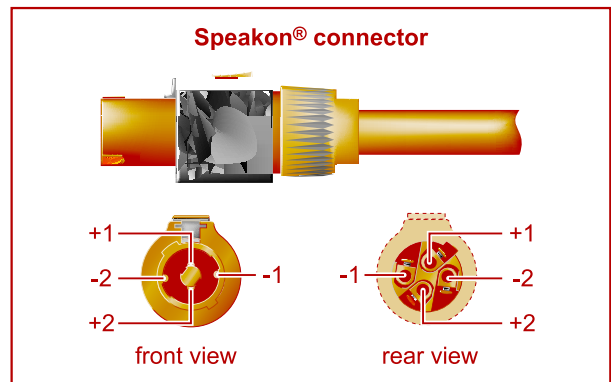


Fig. 6.4: SPEAKON® connector

7. SPECIFICATIONS

AUDIO INPUTS

Active instrument input	1/4" mono jack, unbalanced
Input impedance	approx. 220 k Ω unbalanced
Passive instrument input	1/4" mono jack, unbalanced
Input impedance	approx. 750 k Ω unbalanced
Return	1/4" mono jack, unbalanced
Input impedance	approx. 10 k Ω unbalanced

AUDIO OUTPUTS

Send/Tuner	1/4" mono jack, unbalanced
Output impedance	min. 2.2 k Ω unbalanced
Line Out	1/4" mono jack, unbalanced
Output impedance	approx. 100 Ω unbalanced
Output level	max. +4 dBu
D.I. output	XLR connector, servo-balanced
Output impedance	approx. 100 Ω balanced
Output level	max. -10 dBu
Loudspeaker connectors	1/4" mono jack, unbalanced
	NEUTRIK NL4MP SPEAKON®
	connector
Load impedance	min. 4 Ω

SYSTEM SPECIFICATIONS

Power amp output	300 Watts RMS into 4 Ω
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POWER SUPPLY

Mains voltages	U.S./Canada 120 V~, 60 Hz Europe/U.K./Australia 230 V~, 50 Hz Japan 100 V~, 50 - 60 Hz General export model 120/230 V~, 50 - 60 Hz
Power consumption	max. 490 W
Fuse	100 - 120 V ~: T 12.6 A H 200 - 240 V ~: T 6.3 A H
Mains connection	Standard IEC receptacle

PHYSICAL/WEIGHT

Dimensions (H x W x D)	approx. 5 3/4" (144,6 mm) x 19 1/8" (486 mm) x 12" (305 mm)
Weight	approx. 14 kg (30 7/8 lbs)

BEHRINGER constantly strives to maintain the highest quality standards. Modifications may be made, if necessary, without prior notice. The specifications and appearance of the equipment may therefore differ from those listed or illustrated.

8. WARRANTY

§ 1 WARRANTY CARD/ONLINE REGISTRATION

To be protected by the extended warranty, the buyer must complete and return the enclosed warranty card within 14 days of the date of purchase to BEHRINGER Spezielle Studiotechnik GmbH, in accordance with the conditions stipulated in § 3. Failure to return the card in due time (date as per postmark) will void any extended warranty claims. Based on the conditions herein, the buyer may also choose to use the online registration option via the Internet (www.behringer.com or www.behringer.de).

§ 2 WARRANTY

1. BEHRINGER (BEHRINGER Spezielle Studiotechnik GmbH including all BEHRINGER subsidiaries listed on the enclosed page, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year* from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not excluded from this warranty as described under § 3 and 4, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned parts. In the case that other parts are used which constitute an improvement, BEHRINGER may, at its discretion, charge the customer for the additional cost of these parts.

2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.

3. Warranty claims other than those indicated above are expressly excluded.

§ 3 RETURN AUTHORIZATION NUMBER

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER (see enclosed list) during normal business hours **BEFORE** returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.

2. Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.

3. Shipments without freight prepaid will not be accepted.

§ 4 WARRANTY REGULATIONS

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement by BEHRINGER under the terms of this warranty will be repaired or replaced within 30 days of receipt of the product at BEHRINGER.

2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, potentiometers, keys/buttons and similar parts.

4. Damages/defects caused by the following conditions are not covered by this warranty:

▲ improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals.

▲ connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.

▲ damages/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.

5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

6. If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

§ 5 WARRANTY TRANSFERABILITY

This warranty is extended exclusively to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

§ 6 CLAIM FOR DAMAGES

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

§ 7 OTHER WARRANTY RIGHTS AND NATIONAL LAW

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

* Customers in the European Union please contact BEHRINGER Germany Support for further details.

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